EXHIBIT A

Program for the Assessment of Clinical Cancer Tests (PACCT)

Goals of PAACT

- To ensure translation of new knowledge about cancer and new technologies to clinical practice.
- To develop more informative laboratory tools to help maximize the impact of cancer treatments.

Back to Top

Background of PACCT

Many decisions for cancer patient management depend on information derived from clinical laboratory tests in addition to that derived from the history and physical examination. The reliability of a clinical laboratory test is defined by its performance characteristics in the context of its intended use. Regardless of the test's specific performance characteristics, the treating physician must have confidence that the decisions based on the test will maximize benefit to the patient and minimize risk. Significant research and development are involved in producing a test that is reliable enough for routine clinical use.

The PACCT has been developed to ensure that development of the next generation of laboratory tests is efficient and effective. The implementation of this program is based on the need to address identified barriers to development. New components of the program will be developed as needed.

Back to Top

Barriers to Devel pment

The following are some barriers to development:

- A profusion of small studies appears in the literature in the early phases of development, often with conflicting results, and techniques and data that cannot be compared.
- Studies are often not designed with the power to address the hypotheses posed.
- Many research groups appear to lack access to statistical collaborators.
- Large numbers of well defined and annotated cases or specimens are needed.
- There is often a need for specimens with long periods of follow-up.
- There is a need for standardization of reagents and assay procedures to facilitate comparison of data from multiple studies.
- Intellectual properties issues complicate the development of assays/tests that can be performed for acceptable costs.

Back to Top

Plans

- Convene a Strategy Group (SG) to develop criteria for assessing which markers are ready for further development. The initial focus would be to identify the most pressing clinical questions in a few sites and to identify the most promising markers/techniques based on an extensive review of the literature.
    - The SG will be composed of scientists from academia and industry and NCI staff. Areas of expertise required include clinical oncology, pathology, basic cancer biology, diagnostics technology and assay development, clinical trials methodology, and statistics.
    - SG recommendations will range from the need for workshops, additional research or development of special resources to assay standardization or validation by a clinical trial.
- Form a Statistical Consulting Group (SCG). (Based on identified needs)
    - Members of the SCG would be chosen based on proposed research projects focused on developing new approaches to efficient study design and on adapting existing statistical approaches to new types of analyses.
    - The SCG will assist investigators in developing study designs.
- Improve access to human specimens.

  The following are resources that will help improve access to human specimens.

    - NCI Specimen Resource Locator (http://cancer.gov/specimens)
    - Tissue Expediter program and expanded website to locate required specimens
    - Shared Pathology Informatics Network (SPIN)
    - Prepare tissue micro-arrays:

- Cooperative Breast Cancer Tissue Resource (CBCTR) breast tissue arrays (http://www-cbctr.ims.nci.nih.gov/tma.html)
- Tissue Array Research Program (TARP) (http://www.cancer.gov/tarp)

- Make standardized reagents and control materials available by the:
  - preparation and supply of probes or antibodies that can be used for comparative studies
  - preparation of control materials such as cell lines and/or CBCTR tissue micro-arrays (http://www-cbctr.ims.nci.nih.gov/tma.html)
- Support validation studies.
  - Make facilities available where reagents/assays for the same marker can be compared on standard tumor sets.
  - Support quality control studies by interested laboratories.
  - Involve professional organizations with interest in standardization.
  - Plan and support clinical trials for validation.

Back to Top

Pr gress

- PACCT strategy group
- Clinical tumor marker study publication guidelines draft
- Guidelines for marker development draft
- Program Announcements for:
  - Phased Application Awards in Cancer Prognosis and Prediction (PAR 01-061)
  - Cancer Prognosis and Prediction: SBIR/STTR Initiative (PAR 01-062)
- CBCTR breast cancer progression tissue micro-arrays
  http://www-cbctr.ims.nci.nih.gov/tma.html
- Workshop in conjunction with the National Institutes of Standards and Technology to assess need for a HER2 standard reference material, April 2002.

Back to Top